Defense Energy Support Center 2004 Worldwide Energy Conference Tuesday, September 28, 2004

Track Environmental/Facilities

Spill Prevention





Presentation Outline/Format

- Spill Prevention Update
 - Josh Dickinson, Petroleum Partners
- Readiness when Prevention Fails
 - Cindy Smith, DESC-WQ
- Panel Discussion





Oil Spill Prevention

Spill Prevention, Control and Countermeasure (SPCC) Plans







HISTORICAL PERSPECTIVE

- Dec 1973 Prevention requirements of 112.1 -112.7
- 1991, 1993 and 1997 EPA proposed revisions
- July 17, 2002 Final Revised SPCC Rule published
- Aug 17, 2002 Revised SPCC Rule Effective
- Feb 17, 2006 Plan review / amendments required
- Aug 18, 2006

tion required





GENERAL APPLICABILITY –112.1(a)

- General Requirements
 - Establishes procedures, methods, equipment, and other requirements to prevent discharge of oil
 - Requirement extends to discharges into or upon:
 - US navigable waters
 - Adjoining shorelines
 - Waters of the contiguous zone
 - In connection with activities that may affect <u>US natural</u> resources









GENERAL APPLICABILITY - EXEMPTIONS - 112.1(d)(2)

- Facilities w/completely buried storage capacity ≤ 42,000 gal
 - Does not include completely buried tanks subject to 40 CFR 280 or 281
- Facilities with aboveground storage capacity ≤ 1,320 gallons

 Only containers of oil with a capacity of ≥ 55 gallons threshold

are counted

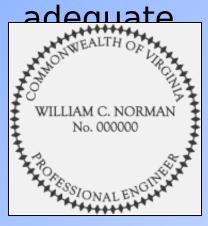


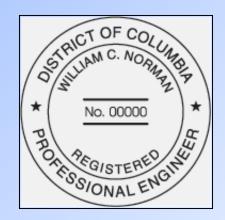


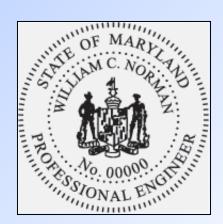


P.E. Certification – 112.3

 PE or agent has <u>visited</u> and examined the facility, good engineering practice includes consideration of applicable <u>industry standards</u> and requirements of 40 CFR 112, inspections and testing <u>procedures established</u>, Plan is











AMENDMENT OF SPCC BY OWNERS OR OPERATORS – 112.5

Requirements

- Amend Plan within 6 months of change in design, O or M, construction that materially affects potential for discharge, or increase/decrease in storage capacity
- Review/evaluate Plan 5 years since last review
- P.E. certifies <u>technical</u> amendment(s)





SECONDARY CONTAINMENT – 112.7(c), 112.8(c)(2), 112.8(c)(11)

 Must provide containment/diversionary structure for the volume of the largest container plus precipitation

- Includes tanks and piping
- Mobile/portable storage containers
- Oil-filled electrical equipment
- Capable of containing spills until cleaned until
- Impacts

- EPA recommends 72 hour permeability and for 25-yr, 24-hr storm event





TANK CAR/TRUCK L/UL RACK – 112.7(h)

Requirements

- Secondary containment capable of max capacity of single compartment if diversion system not used
- EPA guidance states that this section only applies to "racks," although L/UL ops still subject to 40 CFR 112.7(c)







FACILITY DRAINAGE - 112.8(b)

- Requirements
 - Design facility drainage systems from undiked areas to flow into ponds, lagoons, or catchment basins (not subject to flooding)
 - Otherwise equip facility with diversion system to retain oil

Includes piping located outside secondary

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INTEGRITY TESTING - 112.8(c)(6)

Requirements

- Test for integrity on a regular schedule (or during material repairs)
- Must combine visual inspection with a non-destructive testing technique
- EPA ruling for EEP and exemption from 112.8(c)(6): For well-designed containers < 30,000 gal, combine appropriate visual inspection with:
 - Elevation of tank and all sides visible

 Placement of barrier between tank and ground that allows for immediate determiner).





Case Studies – Be Alert!!!







Case Studies - Be Alert!!!

ASTs and Secondary Containment







Case Studies - Be Alert!!!

Piping









Case Studies – Be Alert!!!

Mobile Storage and L/UL Racks









Case Studies – Be Alert!!!

Drainage





